

REMARKS

The claims have been amended to more particularly point out and distinctly claim the Applicants' invention. Claims 5, 9 and 10 have been amended to be independent. Accordingly, claims 1-10 remain for consideration in this application.

Claims 1-4 are rejected under 35 U.S.C. §103(a) as being unpatentable over Tadashi (JP Pub. No. 10-266855).

Tadashi discloses a cooling system for cooling an internal combustion engine 20 and an electric motor 21, generator 22 and inverter 23. As noted a single radiator 13 is provided which has a first flow path 24 for cooling the internal combustion engine 20, and a second flow path 25 for cooling the motor 21, generator 22 and inverter 23. Pump 26 drives the cooling flow through first flow path 24, while pump 27 drives the coolant through second flow path 25. Tadashi is directed mainly towards the structural configurations of radiator 13 itself, rather than the detailed structure of the coolant system. For example, Fig. 2 discloses the radiator 13 having a core 4 with a "partial 4a" and a "partial 4b". In first tank 2 of radiator 13, coolant flowing through partial 4a or partial 4b are allowed to commingle, and thus are common. Radiator cap 9 allows for the radiator to be filled completely for both the first flow path 24 and second flow path 25, from a single location. Based on Fig. 1, Tadashi does not disclose a thermostat.

As noted, Tadashi has two completely separate flow paths. First flow path 24 is driven by water pump 26. The second flow path 25 (which cools the motor 21, generator 22 and inverter 23) is driven by water pump 27. The only place where coolant from the first flow path 24 and

the second flow path 25 intermix is in the first tank 2 of radiator 13. Otherwise, the coolant paths for the internal combustion engine 20 and the motor/generator/inverter are totally separate.

On the contrary, the instant invention, as set forth in amended claim 1, requires the following:

a second flow path, through which the coolant for cooling the motor control device flows, branched from the first flow path at a location inside of the radiator, further the second flow path is again merged into the first flow path downstream of the motor control device, and the merged coolant is circulated by a water pump provided downstream of the merged portion.

Accordingly, the first flow path and the second flow path are branched, “at a location inside the radiator”. Further, the second flow path is then, “merged into the first flow path downstream of the motor control device”. Finally, as noted in claim 1 above, the merged coolant is “circulated by a water pump by the downstream of the merged portion.” Thus, the language of claim 1, as described above, clearly sets forth a structure which is significantly different from the Tadashi reference.

As noted above, Tadashi has two completely separate circuits (or flow paths) which are only joined together at first tank 2 of radiator 13. Because the invention of claim 1 does not have two completely different flow paths (as in Tadashi) but has a first and second flow path which are branched inside the radiator and then are merged after the motor control device, a much more simple cooling system may be provided. In other words, the complex and heavy system of Tadashi can be prevented.

Furthermore, as noted above, the merged coolant is circulated by a “water pump provided downstream of the merged portion.” Thus, only a single water pump is required to circulate

water through the cooling system of amended claim 1. Again, a simpler structure is obtained, and the need for a second water pump is avoided. Once again the cooling apparatus of claim 1 may be provided which is much simpler than the more complex and heavy structure of Tadashi.

Additionally, amended claim 1 requires that:

a temperature setting device in which the coolant circulating in the second flow path which is branched from the first flow path at **the location** inside of the radiator is further cooled..

Thus, the coolant in the second flow path is further cooled after branching from the first flow path inside the radiator. Because of this, the management temperature of the coolant at the motor control device can be easily lowered. On the contrary, Tadashi does not have a similar structure. In view of the amendments to claim 1, and the remarks set forth above, Tadashi clearly does not disclose all of the features recited in amended claim 1. Accordingly, Tadashi cannot anticipate amended claim 1. Additionally, claims 2-4 are dependent from claim 1 and limited to the additional features set forth therein. Accordingly, claims 2-4 are also not anticipated by Tadashi. Thus, it is respectfully requested that the rejection has been overcome and that the rejection over Tadashi be withdrawn.

Applicants wish to thank the Examiner for indicating that claims 5-10 are objected to as being dependent upon a rejected base claim. Accordingly, claims 5, 9 and 10 have been rewritten to be independent. Thus, claims 5-10 should now be allowable.

Application No. 10/760,428
Group Art Unit: 3747

Amendment under 37 C.F.R. §1.111
Attorney Docket No.: 042021

CONCLUSION

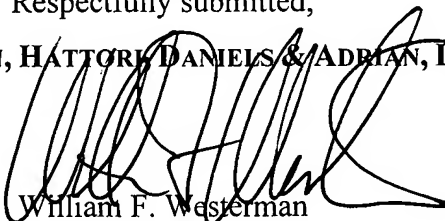
In view of the foregoing amendments and accompanying remarks, it is submitted that all pending claims are in condition for allowance. A prompt and favorable reconsideration of the rejection and an indication of allowability of all pending claims are earnestly solicited.

If the Examiner believes that there are issues remaining to be resolved in this application, the Examiner is invited to contact the undersigned attorney at the telephone number indicated below to arrange for an interview to expedite and complete prosecution of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP



William F. Westerman
Attorney for Applicants
Registration No. 29,988
Telephone: (202) 822-1100
Facsimile: (202) 822-1111

WFW/dlt